

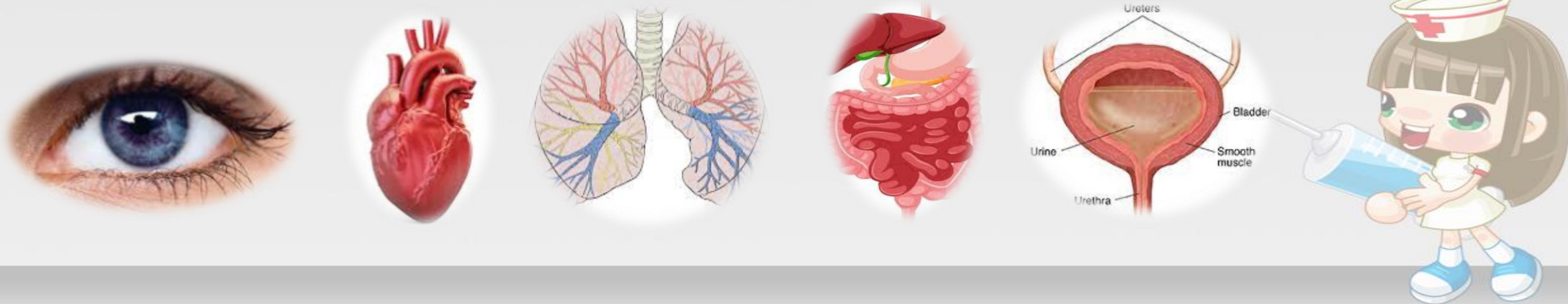
Introduction to Clinical Pharmacology

Chapter 26 Cholinergic Blocking Drugs



Cholinergic Blocking Drugs: Actions

- Cholinergic blocking drugs inhibit the activity of acetylcholine at the parasympathetic nerve synapse
- Some of these drugs inhibit nerve impulses at both muscarinic and nicotinic receptors; affect many organs and structures of the body, including the eyes, respiratory and gastrointestinal (GI) tracts, heart, bladder



Cholinergic Blocking Drugs: Uses

- Primary uses of cholinergic blocking drugs:
 - Pylorospasm and peptic ulcer
 - Ureteral or biliary colic, bladder overactivity
 - Vagal nerve–induced bradycardia
 - Parkinsonism
 - Preoperative reduction of oral secretions



Cholinergic Blocking Drugs: Adverse Reactions

#1

- Gastrointestinal reactions: dry mouth; nausea; vomiting; difficulty in swallowing; heartburn; constipation
- Central nervous system reactions: headache; flushing; nervousness; drowsiness; weakness; insomnia; nasal congestion; fever
- Visual reactions (eyes): blurred vision; mydriasis; photophobia; cycloplegia; increased ocular tension



Cholinergic Blocking Drugs: Adverse Reactions

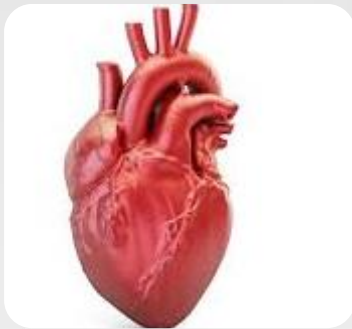
#2

- Genitourinary reactions: urinary hesitancy and retention; dysuria
- Cardiovascular reactions: palpitations; bradycardia; tachycardia
- Other: urticaria; decreased sweat production; anaphylactic shock; rash



Cholinergic Blocking Drugs: Contraindications

- Contraindicated in patients:
 - With hypersensitivity to drugs or with glaucoma
- Anticholinergics are contraindicated in patients:
 - With myasthenia gravis; tachyarrhythmias; myocardial infarction; heart failure (unless bradycardia present)



Cholinergic Blocking Drugs: Precautions

- Use drugs with caution in patients with:
 - GI infections; benign prostatic hypertrophy; urinary retention; hyperthyroidism; hepatic or renal disease; hypertension
 - Use atropine with caution in patients with asthma



Cholinergic Blocking Drugs: Interactions

Interactant drug	Effect of interaction
Antibiotics/antifungals	Decreased effectiveness of anti-infective drug
Meperidine, flurazepam, phenothiazines	Increased effect of cholinergic blocker
Tricyclic antidepressants	Increased effect of cholinergic blocker
Haloperidol (Haldol)	Decreased effectiveness of antipsychotic drug
Digoxin	Increased serum levels of digoxin



Nursing Process: Assessment #1

- Preadministration assessment:
 - Obtain health history and history of signs and symptoms
 - Obtain blood pressure, pulse, and respiratory rate
 - Additional assessment: check stool of the patient who has peptic ulcer for color, signs of occult blood; determine visual acuity in the patient with glaucoma; look for signs of dehydration, weigh the client if prolonged diarrhea



Nursing Process: Assessment #2

- Ongoing assessment:
 - Check vital signs; observe for adverse drug reactions; evaluate the symptoms and complaints related to the patient's diagnosis
 - Report any increase in severity of symptoms to primary health care provider immediately



Nursing Process: Planning

- Expected outcomes for patient
 - Optimal response to therapy
 - Support of patient needs related to the management of adverse reactions
 - Understanding of and compliance with the prescribed therapeutic regimen



Nursing Process: Implementation #1

- Promoting an optimal response to therapy:
 - Patient receiving a preoperative drug:
 - Instruct the patient to void before the drug is given
 - Inform the patient that his or her mouth will become extremely dry, that this is normal, and that fluid is not to be taken
 - Instruct the patient to remain in bed after administration of preoperative drug



Nursing Process: Implementation #2

- Monitoring and managing patient needs:
 - Impaired comfort: xerostomia
 - Encourage patient to take a few sips of water before and while taking an oral drug and to sip water at intervals during meals
 - Check oral cavity daily for soreness or ulcerations



Nursing Process: Implementation #3

- Monitoring and managing patient needs (cont.)
 - Constipation:
 - Urge patient to increase fluid intake up to 2000 mL daily; eat a diet high in fiber; obtain adequate exercise
 - Primary health care provider may prescribe a stool softener, if necessary, to prevent constipation



Nursing Process: Implementation #4

- Monitoring and managing patient needs (cont.)
 - Risk for injury:
 - Drugs may cause drowsiness, dizziness, blurred vision; monitor the patient for any disturbance in vision
 - Elderly patient should be observed at frequent intervals for excitement; agitation; mental confusion; drowsiness; urinary retention



Nursing Process: Implementation #5

- Monitoring and managing patient needs (cont.)
 - Disturbed sensory perception: visual
 - Room should be kept dimly lit and curtains or blinds closed to eliminate bright sunlight in the room
 - Assist patient to find other forms of diversional therapy, such as interaction with others or listening to the radio



Nursing Process: Implementation #6

- Monitoring and managing patient needs (cont.)
 - Ineffective tissue perfusion:
 - Monitor for change in pulse rate or rhythm
 - Failure of drug to increase the heart rate must be reported to the primary health care provider immediately



Nursing Process: Implementation #7

- Educating the patient and family:
 - Inform the patient about common adverse reactions associated with these drugs
 - Caution must be observed while driving or performing other tasks requiring alertness and clear vision
 - List the adverse reactions that can be included in the teaching plan, along with the measures that may lessen their intensity or allow the patient to perform tasks at times when these adverse reactions are least likely to occur



Nursing Process: Implementation #8

- Educating the patient receiving a preoperative drug:
 - Give patient an explanation of preoperative drug
 - Inform the patient and family members that drowsiness, extreme dryness of mouth and nose will occur about 20 to 30 minutes after drug is given



Nursing Process: Implementation #9

- Educating the patient with a peptic ulcer:
 - Give patients with peptic ulcer full explanation of treatment regimen
 - Discuss importance of diet in peptic ulcer treatment and give full explanation of special diet



Nursing Process: Evaluation

- Therapeutic effect is achieved
- Adverse reactions are identified, reported, and managed successfully through appropriate nursing interventions
- Oral mucous membranes remain moist
- Patient complies with prescribed drug regimen



Nursing Process: Evaluation

- No evidence of injury is seen
- Patient and family demonstrate an understanding of the drug regimen
- Patient verbalizes importance of complying with the prescribed therapeutic regimen

